



**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

<b>APPLICANT(S):</b>	JACK LEES AND TATUM	§	<b>ATTORNEY DOCKET</b>	
	SHEFFIELD	§	<b>NUMBER:</b>	HESI.110405
<b>SERIAL</b>		§		
<b>NUMBER:</b>	10/692,908	§		
<b>FILING DATE:</b>	OCTOBER 24, 2003	§	<b>ART UNIT:</b>	
<b>FOR:</b>	SYSTEM AND METHOD	§		
	FOR ANALYZING AND	§		
	IMAGING AN ENHANCED	§	<b>EXAMINER:</b>	
	THREE-DIMENSIONAL	§		
	VOLUME DATA SET USING	§		
	ONE OR MORE	§		
	ATTRIBUTES	§		

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22231-1450

Dear Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§1.56, 1.97 and 1.98. A copy of each of these documents was provided during prosecution of U.S. Serial No. 09/936,780 and is therefore, not required under 37 C.F.R. § 1.98(d).

Applicant reserves the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

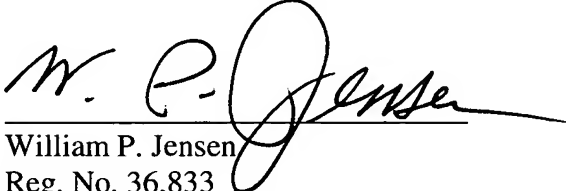
The filing of this information disclosure statement shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in §1.56(b).

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith. It is further understood that the Examiner will consider information that had been cited by or submitted to the U.S. Patent and Trademark Office in a prior application relied on under 35 U.S.C. & 120.1138 OG 37, 38 (May 19, 1992).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and to indicate in the official file wrapper of this patent application that the documents have been considered.

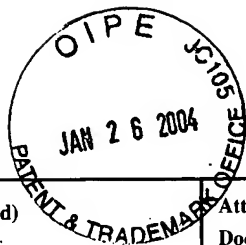
Although Applicants do not believe a fee is due for this filing, the Commissioner is hereby authorized to charge any amount required, or credit any overpayment, to Account No. 19-2112. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

  
William P. Jensen  
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Date: January 23, 2004

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<b>PTO-1449 (Modified)</b>  <b>U.S. DEPARTMENT OF COMMERCE</b> <b>PATENT AND TRADEMARK OFFICE</b>  <b>INFORMATION DISCLOSURE STATEMENT</b> <b>BY APPLICANT</b>	<b>Attorney</b> <b>Docket No.:</b>	<b>HESI.110405</b>	<b>Serial</b> <b>Number:</b>	<b>10/692,908</b>
	<b>Applicant:</b>			
	<b>Filing Date:</b>		<b>Group:</b>	
		<b>Jack Lees and Tatum Sheffield</b>		
		<b>October 24, 2003</b>		

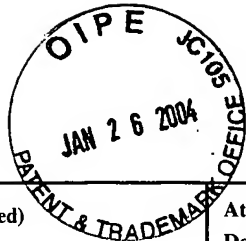
## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	ISSUE DATE	INVENTOR	CLASS	SUBCLASS	FILING DATE
	4,467,461	08/21/84	Rice, et al.	367	70	01/05/81
	4,751,643	06/14/88	William E. Lorensen, et al.	364	414	
	4,984,157	01/08/91	Cline, et al.	367	413	09/21/88
	5,410,250	04/25/95	Brown, Hugh K.	324	309	09/28/93
	5,455,896	10/03/95	Takamura, Teiji	395	119	11/29/94
	5,563,949	10/08/96	Michael S. Bahorich, et al.	364	421	
	5,574,836	11/12/96	Raymond M. Broemmelsiek	395	127	
	5,586,082	12/17/96	Anderson, et al.	367	73	03/02/95
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	5,798,982	08/25/98	He, et al.	367	73	03/02/95
	5,852,447	12/22/98	Hosoya, et al.	345	468	05/17/96
	5,930,730	07/29/99	Kurt J. Marfurt, et al.	702	16	
	5,966,672	10/12/99	Knupp, Daniel F.	702	16	07/28/97
	6,083,162	07/04/00	David J. Vining	600	407	
	6,144,383	11/07/00	Lichtenbelt, et al.	345	419	05/30/97

## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 96/18915	06/20/96	PCT				

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
<b>EXAMINER: Initial citation if reference was considered. Draw line through citation if not in conformance to MPEP 609 and not considered. Include copy of this form with next communication to applicant.</b>	



<b>PTO-1449 (Modified)</b>  <b>U.S. DEPARTMENT OF COMMERCE</b> <b>PATENT AND TRADEMARK OFFICE</b>  <b>INFORMATION DISCLOSURE STATEMENT</b> <b>BY APPLICANT</b>	<b>Attorney</b> <b>Docket No.:</b>	<b>HESI.110405</b>	<b>Serial</b> <b>Number:</b>	<b>10/692,908</b>
	<b>Applicant:</b>			
	<b>Jack Lees and Tatum Sheffield</b>			
	<b>Filing Date:</b>	<b>October 24, 2003</b>	<b>Group:</b>	

EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place Of Publication)
	Compton, Mark, "A Dream Comes True," IRIS Universe #26, June 1997, 3 pages
	"Texaco Announces the Opening of New 3-D Visualization Center in Houston," Business Wire, November 11, 1997, 1 page
	Antosh, Nelson, "Oil Now Showing at a Theater Near You," Houston Chronicle, September 19, 1997, 2 pages
	Abstract, "3-D Seismic Visualization<," Emerging Technologies Group, Houston Geological Society, March 1998
	GeoQuest, IESX Integrated Multisurvey Interpretation Software Product Description 23-Feb-96 (printed 5/3/98) 17 pages
	VoxelGeo Product Description, Paradigm Geophysical, 1996 (printed 3/27/98), 6 pages
	"CogniSeis Turns Up the Volume with the Latest Release of VoxelGeo," Press Release, April 30, 1997 (printed 3/27/98), 2 pages
	Peloso, Andy, "Open Vision 4.0," UserNet, May/June 1997 (printed 3/27/98), 8 pages
	Hutchinson, Suzi, "FZAP! 1.0 Offers Automated Fault Picking," UserNet, May/June 1997 (printed 3/27/98), 5 pages
	Shamban, Adam, et al., "Earth Cube 1.2: New Functionality and Work Flows," UserNet, May/June 1997 (printed 3/27/98), 10 pages
	"GeoQuest at a Glance," printed 5/3/98, 3 pages
	"GeoQuest Enhances GeoViz and Voxels for OCTANE," 1997 (printed 5/3/98), 3 pages
	Kate Thomas, "Oil Biz Gushes Patents," The National Law Journal, February 6, 1998, pp. 1, 26
	G. Alan Petzet, "Interactive 3D Visualization Speeds Well, Reservoir Planning," Oil and Gas Journal, Nov. 24, 1997, pp. 82-83
	Robert L. Scheier, "Creating a Cash Gusher," Computerworld, April 21, 1997, pp. 76-78
	Michael J. Zeitlin, "Integration Strategy Takes Full Advantage of 3-D Seismic Capability," World Oil, May 1995, pp. 59-60

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EXAMINER: Initial citation if reference was considered. Draw line through citation if not in conformance to MPEP 609 and not considered. Include copy of this form with next communication to applicant.	

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